

RECEIVED
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SEP 27 2005

PATENT
Docket No. 315.0001 0101IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): JANSSEN, Terrance E.)	Group Art Unit:	3753
)		
Serial No.: 10/721,698)	Examiner:	JOHN K. FORD
Confirmation No.: 6282)		
)		
Filed: November 25, 2003)		
)		

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING
SAME

DECLARATION OF PRIOR INVENTION TO OVERCOME
CITED PATENT UNDER 37 C.F.R. §1.131

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Purpose of Declaration

This declaration is to establish and/or evidence the conception of the present invention prior to the effective date of the JP 2002-30717 reference (i.e., the publication date of 31 January 2002) coupled with due diligence from prior to the effective reference date (i.e., the publication date of 31 January 2002) to the filing date (i.e., 27 November 2002) of provisional application Serial No. 60/429,160 (e.g., constructive reduction to practice) to which the above-identified application claims priority. With the evidencing of such conception, diligence, and constructive reduction to practice, the JP 2002-30717 reference which has been cited against the above-identified application is removed as a reference.

This declaration is made by the sole inventor of the claims pending in the above-identified application, Terrance E. Janssen.

DECLARATION UNDER 37 C.F.R. §1.131

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Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAMEFacts and Documentary Evidence

I, Terrance E. Janssen, state the following:

1. I am the sole named inventor of the above-identified application.
2. The claimed invention pending in the above-identified application was conceived in the United States prior to 31 January 2002, the publication date of the JP 2002-30717 reference. Attached as Exhibit A, is a document relating to this conception, wherein the document is as follows:

(A-1) A final design drawing completed in December 2001 using the office AutoCAD with the assistance of employee, Brian Urlaub.
3. Pursuant to this conception as evidenced above, from prior to 31 January 2002 (i.e., the publication date of the JP 2002-30717 reference) to the filing date (i.e., 27 November 2002) of provisional application (i.e., U.S. Serial No. 60/429,160), the Applicant for patent was diligent. The present application claims the benefit of the provisional application, U.S. Serial No. 60/429,160. Attached as Exhibit B, are a series of documents relating to this diligence.

(B-1) From January 7, 2002, I had numerous telephone conversations with John Lebo regarding manufacturing that portion of the invention that is inserted into the water main. Attached hereto as Exhibit B-1 is a copy of an e-mail dated June 28, 2002 to John Lebo who is the president of Doucette Manufacturing setting forth cost of manufacturing a part that is inserted into the municipal water main.

(B-2 through B-5) Commencing in January, 2002, I began exploring sites to reduce the invention to practice. In other words, it was necessary to get the cooperation of and the approval

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from entities who owned sites where the present invention could be reduced to practice. For example, such sites included water mains for real estate development, such as co-housing projects, where the water distribution system would be privately owned by an association of landowners, the developer or, other entity such as, North American Energy Co. (of which I was the sole shareholder, sole board member and chief executive officer). In connection therewith, to locate a place to reduce the invention to practice, attached as Exhibit B-2 is a letter to the University of Wisconsin-Milwaukee dated January 15, 2002; attached as Exhibit B-3 is an e-mail dated May 23, 2002 and an e-mail dated May 28, 2002 to Giles Blunden at Bolin Creek Cohousing; attached as Exhibit B-4 is an e-mail to Homestead Community Land Trust dated May 28, 2002 together with a document titled Notes/History; and attached as Exhibit B-5 is a document titled Notes/History as it pertains to Building Science Engineering, which is an engineering firm that designs co-housing projects.

(B-6) Attached hereto as Exhibit B-6 is a copy of an e-mail dated August 29, 2002 to the City of Burnsville. The City of Burnsville was involved in developing a "downtown" area of the city and in connection therewith I was hopeful that the concept of geothermal heating and cooling with heat exchangers on the municipal water main could be used. Subsequent to the e-mail there were additional communications with the City of Burnsville.

(B-7) Attached hereto as Exhibit B-7 is a copy of a letter dated November 4, 2002 pertaining to my speaking at a meeting of the Iowa Association of Municipal Utilities, the subject of which was the installation of heat exchangers on municipal water mains.

(B-8 thru B-9) From June, 2002 through November 27, 2002, I had meetings and telephone conversations with officials of the Minnesota Department of Health about approving the use of the present invention for attachment on municipal water mains in the State of Minnesota. Such approval was necessary before the present invention could be reduced to practice in a municipal

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water main. Attached as Exhibit B-8 is a draft of a letter to the Minnesota Department of Health dated November 29, 2002 referring to a November 27, 2002 meeting where oral approval of the invention for installation in municipal water mains was given. By letter dated December 21, 2003 addressed to Brian Noma, Public Health Engineer, Minnesota Department of Health (a copy of which is attached hereto as Exhibit B-9), reference was again made to the November 27, 2002 meeting and a request was made for written approval for installation of the invention on municipal water mains.

(B-10) Muscatine Power & Water and the City of Muscatine were interested in using municipal water mains for geothermal heating and cooling systems and in July, 2002. I met with the city Council members and management for Muscatine Power & Water. Attached as Exhibit B-10 is a copy of an e-mail that I received from Muscatine Power & Water on June 26, 2002 and forwarded on to John Lebo.

(B-11) After finalizing the design of the present invention, I had to locate the manufacturers of various parts required by the invention in order to go forward with reducing the invention to practice. Attached as Exhibit B-11 is a document entitled "Notes/History" for Groeber & Associates Inc. (which is a manufacturer of copper fittings) showing a contact on April 23, 2002.

4. The provisional application (i.e., U.S. Serial No. 60/429,160) of which the present application claims the benefit was filed on 27 November 2002, constructively reducing the invention to practice.

5. The evidence provided above establishes that the present invention was conceived prior to the effective date of the JP 2002-30717 reference (i.e., the publication date of 31 January 2002) and due diligence occurred from prior to the effective reference date (i.e., the publication date of 31 January 2002) to the filing date (i.e., 27 November 2002) of provisional application

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Filed: November 25, 2003

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Serial No. 60/429,160 (e.g., constructive reduction to practice) to which the present application claims priority. During this short period of time, the attorney also required time to prepare the provisional application to constructively reduce the invention to practice.

Time of Presentation of the Declaration

This declaration is submitted with the first response after non-final rejection and is for the purposes of overcoming the rejection.

Declaration

As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor SignatureFull Name of Inventor Terrance E. JanssenInventor's Signature [Signature]Date 9/26/05 Country of Citizenship USAResidence 252 Hermosita Drive St. Pete Beach, FL 33706Post Office Address St. Pete Beach, FL

EXHIBIT A
for
DECLARATION OF PRIOR INVENTION
TO OVERCOME CITED PATENT UNDER 37 C.F.R. §1.131

Copyright North American Energy 2001

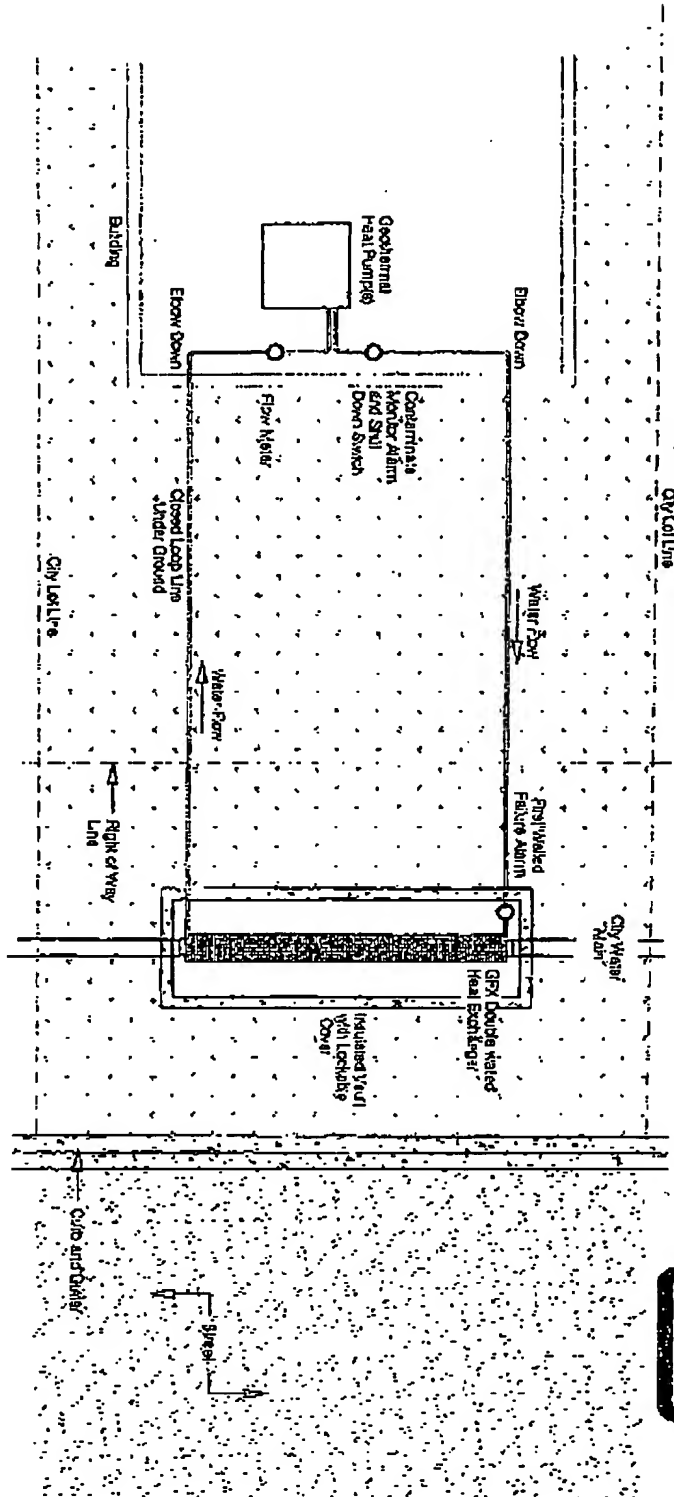


EXHIBIT
A-1

EXHIBIT B
for
DECLARATION OF PRIOR INVENTION
TO OVERCOME CITED PATENT UNDER 37 C.F.R. §1.131

Terry Janssen

From: John Lebo <johnl@doucetteindustries.com>
To: Terry E. Janssen (E-mail) <tjanssen@northamericanenergyco.com>
Cc: Carmine Vasile (E-mail) <gfc-ch@msn.com>
Sent: Friday, June 28, 2002 3:02 PM
Subject: Our Q-12658

Terry,

Per your 6/26/02 phone request, we quote the following two models for your consideration to be used in conjunction with geothermal heat pumps.

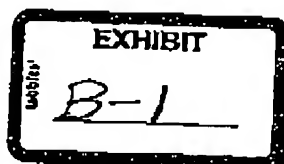
The "drain" pipe is made of Type L hard copper tubing. Type L is what's used in homes.

The water flow rate in the main is given for reference because that's what it balances out to be.

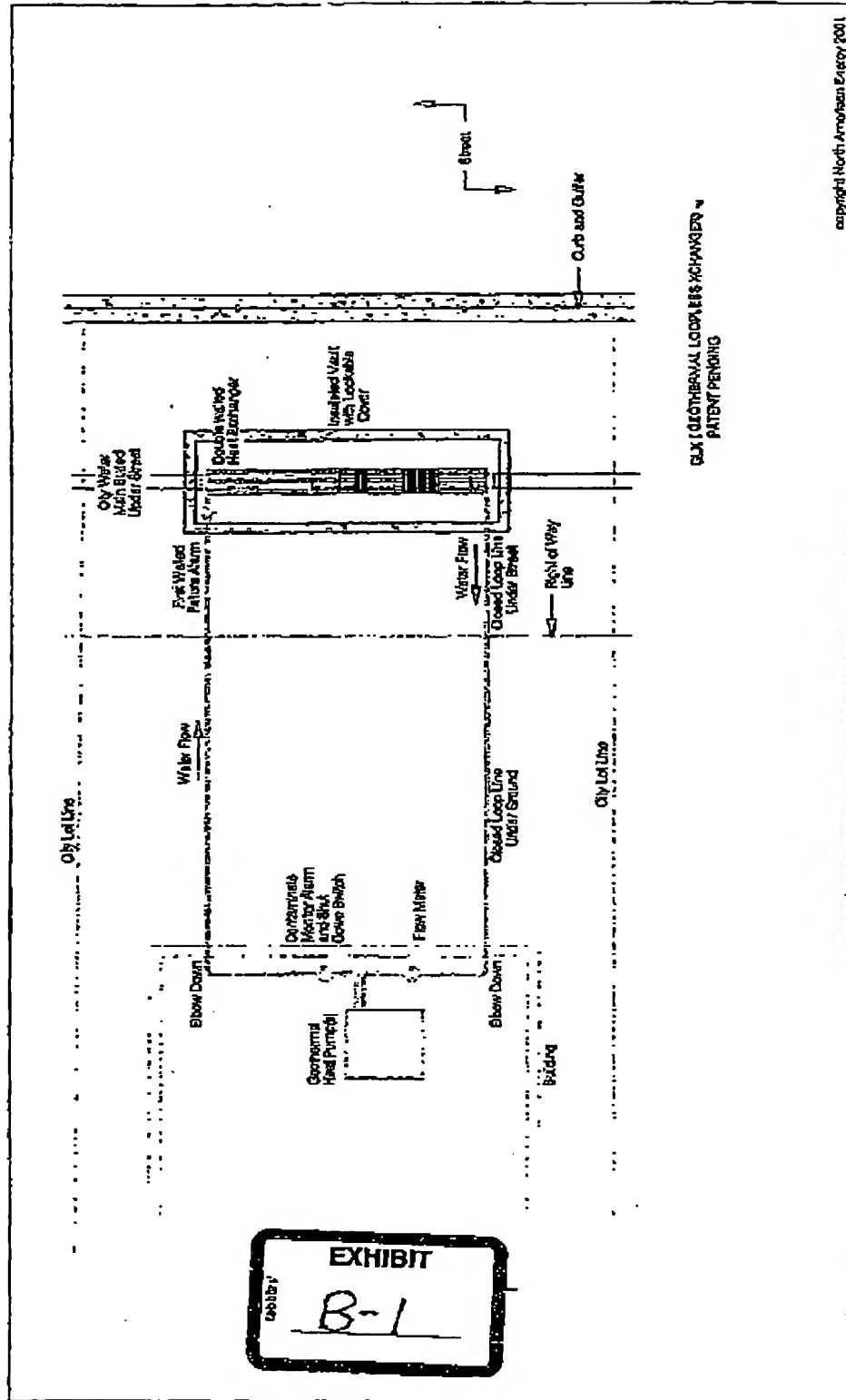
Loop GPM is based on a 10F split. Please advise with any questions. johnl

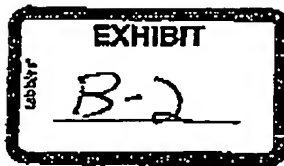
A. Model: G6-60-3 (6 x 1)
GFX Vented Double Wall Heat Exchanger
Perf: Cool 6.9 GPM of loop water from 80 to 70F, 5.1 psi PD
using 34.3 GPM of main water from 54 to 56F
Const: Type L hard large tube
Type L light annealed coil tubing
Manifolding Type L copper tubing
Fittings - standard refrigeration quality
Design: 150# DWP
Conn: 6-1/8" OD main
1-1/8" ID coil side manifold
Price: \$ 1,700.00 List each
Ship: 3-4 Weeks ARO
Terms: FOB York, PA / Net 30

B. Model: G6-80-4 (6 x 1-1/4)
GFX Vented Double Wall Heat Exchanger
Perf: Cool 9.2 GPM of loop water from 80 to 70F, 5.2 psi PD
using 46.2 GPM of main water from 54 to 56F
Const: Type L hard large tube
Type L light annealed coil tubing
Manifolding Type L copper tubing
Fittings - standard refrigeration quality
Design: 150# DWP
Conn: 6-1/8" OD main
1-3/8" ID coil side manifold
Price: \$ 2,250.00 List each
Ship: 3-4 Weeks ARO



5/28/02



**METROPOLITAN LAW CENTER, LTD.***Formerly London Anderson Antolak & Hoeft, Ltd.*

January 15, 2002

VIA FACSIMILE

Stanley J. Wrzeski Jr.
University Of Wisconsin-Milwaukee
PO Box 413
Milwaukee, WI 53201

RE: North American Energy Co./ The Upland Project
Our File No.: 21073.001

Dear Stanley:

Mr. Terry Janssen of North American Energy Co. asked me to respond to your recent inquiry about documents to be used in a potential agreement with the developers of The Upland Project in Sun Prairie, WI and North American Energy Co.

The documents are comparatively simple and straight forward. Each project is somewhat different so the documents are drawn separately to fit each situation, consequently there is no standard form that we can provide. Agreements that we have drafted for clients, in addition to being confidential, are proprietary and we do not distribute them unless in the context of work product for a client.

The specific document to be used for the above referenced project obviously has not been drafted however, the relevant agreements, among other things, would:

1. Provide for a liaison committee that would be appointed by and represent the property owners association on matters pertaining to the central geothermal system. In the event that North American and/or the system owner fails to provide the agreed to repair and maintenance, the property owners association would assume ownership of the system and use the monthly use fees and any remaining hook up charges to fund the operation of the central geothermal system. This provision would provide that North American would be entitled to recover its initial cost of installing the central system.
2. Provide for a deposit from the developer pursuant to North American's deposit schedule. It would also provide that the deposit would be refunded to the developer at the time the central system is installed and be forfeited if the owners proceed to the engineering phase and subsequently decide to abandon the project.

130 Anchor Bank Building • 14665 Galaxie Avenue • Apple Valley, MN 55124
TELEPHONE 952.432.4400 • FACSIMILE 952.432.1301

Mr. Stanley Wrzeski, Jr.
January 15, 2002
Page 2

3. Provide that the developer would grant easements to the central system owner at the time engineering is complete and all facets of the system are agreed to between the developer, system owner and North American. The easements would, among other things:
 - A. Grant permission to the system owner and North American to install, maintain and repair the loop system and related supply and return pipe to each lot.
 - B. Describe the hook up charge and related monthly fees to be paid by each property owner that utilizes the central system.
 - C. Include the provisions mentioned in paragraph 1 above.
4. Set forth the obligations of North American and the developer with respect to the design and construction of the geothermal system.

North American forms a separate entity for each central system and has an agreement with the system owner to provide the engineering and installation of the system and subsequent management, maintenance and repair. North American in addition to its cost of engineering, material, labor and indirect overhead receives a construction management fee for the installation of the system and monthly management fee for maintenance.

If you have questions please call Mr. Janssen or myself.

Very truly yours,

METROPOLITAN LAW CENTER, LTD.

Laurence A. Anderson

LAA/mlb

cc: Dave Porterfield (via facsimile)



C:\Documents and Settings\Owner\My Documents\My Documents Laptop\My Documents\NAE001 General Corporate\Uplands\Wrzeski Jr 011502.doc

From: Outlook Express::T.E. Janssen
To: Blunden, Giles at Bolin Creek Cohousing
Subject: Central Alternative Energy
Date: 8:34 AM - 5/23/2002

Hi Giles

North American Energy Co. is involved in all types of Alternative Energy, geothermal, Wind Generation and photovoltaics. North American will consider installing any or all of the above systems with out cost to the development or developer. The development provides easements to North American to locate the central system and to run necessary connections to each dwelling unit. Usually we can locate our connections etc. in the same utility easements being provided to run other utilities. North American owns and operates the system similar to a utility which includes maintenance of the system in perpetuity. North American recaptures its investment and maintenance cost by charging each dwelling unit a hook up fee and monthly use fee.

Wind generation systems are many times difficult because of site location and related limitations, photovoltaics usually work in most locations but many times are still an economic struggle without grants, which we can many times obtain. Geothermal almost always works and is very attractive economically.

If North American owns and operates the central system it will make available its performance financing program for geothermal heating and air conditioning systems to each individual owner which systems are installed and serviced by its local dealer. If the individual owner contributes an initial dollar amount equal to what a conventional system would cost and pays an amount each month equivalent to what the conventional system utility bill would have been North American will finance the extra cost of geothermal systems and hook up fee. North American's pay back comes from the savings in utilities, when the extra cost is amortized out of the savings in utilities the owner gets the benefit of the reduced utility cost which can be a savings of 60% to 70% after the monthly use fee.

If you are going to consider our program it is very important that we get involved as early in the process as possible. North American requires that the developer or organization sign a no obligation letter of intent at which time we will prepare a written evaluation for your review. If you want to proceed after reviewing the evaluation we then enter in to a more formal agreement before we start the engineering.

If you would like me to send you a letter of intent for your review please contact me.

Thanks / Terry
terry@aboutnae.com
North American Energy Co.
312 N. Main St.
Stillwater, MN 55082
Ph.651-275-3940 Fax 651-275-3932
www.aboutnae.com



From: Outlook Express: T.E. Jaassen
 To: Blunden, Giles at Bolin Creek Cohousing
 Subject: Central Alternative Energy Systems
 Date: 4:45 PM - 5/26/2002

Hi Giles

Chris Scottanson asked me to forward this material to you.

NORTH AMERICAN ENERGY CO. / CENTRAL ALTERNATIVE ENERGY SYSTEMS; GEOTHERMAL / WIND / PHOTOVOLTAICS / FUEL CELLS

PROVIDE:

*An emission free friendly environment *Low cost utilities *Performance financing

North American/WaterFurnace=North American/Photovoltaics=North American / Wind
 Expert design=High quality state of the art equipment=Professional installations=Energy Financing

North American Energy Co. installs CENTRAL ALTERNATIVE ENERGY SYSTEMS at no cost to the developer. North American receives a hook up and monthly use fee from the individual building owners to provide perpetual maintenance to the central system and recover its investment cost. North American / WaterFurnace dealers are available to provide and install individual geothermal HVAC systems for each owner. Any HVAC geothermal system installed by North American / WaterFurnace dealers have performance financing available so each owner has the opportunity to pay the extra cost of geothermal out of utility savings.

Note:

See case study "BRITISH COLUMBIA" below. Other case studies "MOJAVE DESERT PROJECT" and "LAS VEGAS CENTRAL SYSTEM PROJECT" are attached to this e-mail in PDF files.

SUN RIVERS COMMUNITY KAMLOOPS, B.C.

CANADA'S FIRST AND ONLY EXCLUSIVE GEOTHERMAL COMMUNITY

Sun Rivers Golf Resort Community is the first and only community in British Columbia that is entirely heated and cooled using WATERFURNACE geothermal heating and cooling systems.

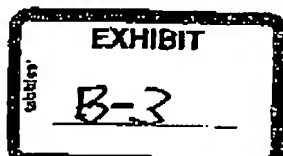
Sun Rivers is situated on a spectacular 460-acre site overlooking the city of Kamloops and Thompson Valley. It will ultimately consist of 2000 homes integrated around a championship golf course. A resort hotel, village center, gift shops, office buildings and other facilities will make Sun Rivers one of the finest lifestyle communities in British Columbia. With its compact urban form and clustered approach to development.

Sun Rivers is uniquely appropriate for geothermal heating and cooling. "Geothermal is the ultimate system for the future and the way we are doing it saves money as we operate the utilities and installation costs are amortized over time," explained George Schurian, Sun Rivers President. "It makes absolute sense to utilize an entirely renewable energy source right in our own back yards."

This unique arrangement allows them to have better control over capital costs. In addition, they also own all of the geothermal loop systems and receive a monthly "access fee" from homeowners within the community. Homeowners benefit from this arrangement because they don't have to pay for the initial loop installation costs and can reap the benefits of geothermal's energy and cost savings starting from day one. "We are pleased to have chosen WATERFURNACE as our exclusive supplier of geothermal equipment," remarked Leslie Brochu, Sun Rivers Director of Marketing and Public Relations. "We chose WATERFURNACE because of its leading edge reputation, and its organizational and support structure. They are well established and have the technical, training and support structure in place to help us be successful," she continued. "We were interested in a superior product and are quite confident that we have found this with WATERFURNACE." Sun Rivers has won over 30 housing and development awards over the past two years for their ENVIRONMENTAL EXCELLENCE.

"As energy costs continue to rise, we are proud to be recognized as being the industry leader in bringing consumers tremendous energy costs savings with an environmentally superior heating and cooling solution," stated Schurian. For more information on Sun Rivers, visit www.sunrivers.com

"Geothermal is the ultimate system for the future and the way we are doing it saves money...it makes absolute sense to utilize an entirely renewable energy source right in our own back yards."



From: Outlook Express: T.E. Janssen
To: [Homestead Community Land Trust]
Subject: Central Alternative Energy Systems
Date: 4:41 PM - 5/28/2002

Chris Scothanson asked me to forward this information.

NORTH AMERICAN ENERGY CO. / CENTRAL ALTERNATIVE ENERGY SYSTEMS: GEOTHERMAL / WIND / PHOTOVOLTAICS / FUEL CELLS

PROVIDE:

"An emission free friendly environment "Low cost utilities "Performance financing

North American/WaterFurnace=North American/Photovoltaics=North American / Wind
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Note:

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Sun Rivers is uniquely appropriate for geothermal heating and cooling. "Geothermal is the ultimate system for the future and the way we are doing it saves money as we operate the utilities and installation costs are amortized over time," explained George Schurian, Sun Rivers President. "It makes absolute sense to utilize an entirely renewable energy source right in our own back yards."

This unique arrangement allows them to have better control over capital costs. In addition, they also own all of the geothermal loop systems and receive a monthly "access fee" from homeowners within the community. Homeowners benefit from this arrangement because they don't have to pay for the initial loop installation costs and can reap the benefits of geothermal's energy and cost savings starting from day one. "We are pleased to have chosen WATERFURNACE as our exclusive supplier of geothermal equipment," remarked Leslie Brochu, Sun Rivers Director of Marketing and Public Relations. "We chose WATERFURNACE because of its leading edge reputation, and its organizational and support structure. They are well established and have the technical, training and support structure in place to help us be successful," she continued. "We were interested in a superior product and are quite confident that we have found this with WATERFURNACE." Sun Rivers has won over 30 housing and development awards over the past two years for their ENVIRONMENTAL EXCELLENCE.

"As energy costs continue to rise, we are proud to be recognized as being the industry leader in bringing consumers tremendous energy costs savings with an environmentally superior heating and cooling solution," stated Schurian. For more information on Sun Rivers, visit www.sunrivers.com

"Geothermal is the ultimate system for the future and the way we are doing it saves money...it makes absolute sense to utilize an entirely renewable energy source right in our own back yards."



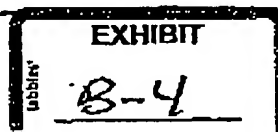


Notes/History

T. E. "Terry" Janssen, My Record
 35248 US Hwy 13
 #316
 actionmgt@comcast.net
 Palm Harbor, FL 34684

Contact : Holiday Inn				
Field Changed	2/4/2002	7:06 AM	ID/Status - Hotel & Motel	
Contact : Holiday Inn Airport (Intercon...				
Field Changed	2/4/2002	10:15 AM	ID/Status - Hotel & Motel	
Contact : Holiday Inn Downtown				
Field Changed	2/4/2002	10:16 AM	ID/Status - Hotel & Motel	
Contact : Holiday Inn Express				
Field Changed	2/4/2002	10:17 AM	ID/Status - Hotel & Motel	
Contact : Holiday Inn Financial Plaza (Holi...				Melissa
Field Changed	2/4/2002	10:31 AM	ID/Status - Hotel & Motel	
Contact : Holiday Inn Select				
Field Changed	2/7/2002	1:04 PM	ID/Status - Hotel & Motel	
Contact : Holiday Isle				Ed Kinkelaar
Field Changed	2/18/2002	1:04 PM	ID/Status - Marinas	
Contact : Home Depot				Kathleen McCrory
Field Changed	1/25/2002	4:15 PM	ID/Status - Materials Construction	
Contact : Homestead Community Land T...				
Field Changed	11/29/2002	2:42 PM	ID/Status - Misc.	
E-mail Sent	5/30/2002	8:27 AM	Subject: Saving Energy	
E-mail Sent	5/28/2002	4:41 PM	Subject: Central Alternative Energy Systems	
To-do Done	5/28/2002	4:41 PM	Send e-mail per Scothanson	
Field Changed	5/25/2002	7:57 AM	ID/Status - Alt. Energy App Dev Pros	
Note	5/25/2002	7:53 AM	Homestead Community Land Trust	
			1309 13th Ave. S.	
			Seattle, WA 98144	
			(206) 323-1227	
			homesteadcl@yahoo.com	
			www.scr.org/neighborsclt	
Contact : Homestead Village Guest Studios				
Field Changed	2/18/2002	1:02 PM	ID/Status - Hotel & Motel	
Contact : Hope Town Marina -Club Soleil				
Field Changed	2/18/2002	1:02 PM	ID/Status - Marinas	
Contact : Hudson Engineering LLC				Trent Farago

Created 9/18/2005 at 7:20 AM



35



Notes/History

T. E. "Terry" Jansse., Wy Record
35246 US Hwy 19
#316
actionmgmt@comcast.net
Palm Harbor, FL 34684

Contact : Builder Development Financing

Field Changed 11/30/2002 4:52 PM

Dick Swagman

ID/Status - Alt. Energy Financing

Contact : Building Science Engineering

Field Changed 11/29/2002 2:44 PM

Call Attempted 7/1/2002 8:54 AM

E-mail Sent 8/18/2002 6:46 PM

To-do Done 5/28/2002 5:15 PM

E-mail Sent 5/28/2002 4:50 PM

To-do Done 5/28/2002 4:50 PM

Note 5/25/2002 6:50 AM

Mark Kelley

ID/Status - Engineer Civil

Did he receive / Send e-mail per Scott Hanson

Subject: Energy Saving Products

Get Alberto contact info from Scott Hanson

Subject: Central Alternative Energy Systems

Send e-mail per Scott Hanson

Thank you for calling. Please contact Mark Kelley and our architect about this project. The architect's name is Alberto Cardenas, of DMK architects in Boston. I have included contact information for each of them.

Field Changed 5/25/2002 6:17 AM

Note 5/25/2002 6:09 AM

ID/Status - Alt. Energy App Dev Pros

beginvcard

version:3.0

fn:Mark Kelley

n:Kelley;Mark;

org:Building Science Engineering

adr:;type=work;type=prett;;Boston,MA;

label:;type=work;type=prett;;Boston, MA

tel:;type=work;(978) 456-6950

tel:;type=work;type=fax;(978) 456-8080

email:;type=internet;type=prett;dragon@world.std.com

endvcard

Contact : California Energy Commission

Field Changed 1/30/2002 4:58 PM

Sandy Miller

ID/Status - Alt. Energy Financing

Contact : Capital One D 6457

To-do Done 9/14/2002 9:12 AM

To-do Done 8/5/2002 6:06 AM

To-do Done 7/27/2002 4:30 AM

To-do Done 6/16/2002 5:57 PM

To-do Done 5/5/2002 12:00 PM

To-do Done 4/12/2002 8:00 AM

Field Changed 3/15/2002 6:03 PM

To-do Not Done 3/6/2002 9:14 AM

Note 2/19/2002 4:01 PM

Send payment due on the 8th

Send payment due on the 8th

Send payment due on the 8th

Send payment due on the 8th

Send payment due on the 8th

Send payment due on the 8th

Last Results - password 6453

Send payment due on the 8th

Date: Tuesday, February 19, 2002

To: Bankruptcy Department

Capital One

Phone: 800-606-5227

Fax: 800-667-6347

From: T. E. Janssen

Phone: 651-275-3940

Created 9/19/2005 at 7:29 AM

We have completed one project of 33 homes and are working on a second with a projected 45 town homes with a net density of about 10 units per acre.

EXHIBIT

tabular

B-5

From: Outlook Express: T.E. Janssen
To: Tschumper, Judy at City Of Burnsville
Subject: Water Main Heat Exchanger
Date: 6:00 PM - 8/29/2002

Hi Judy
Thanks for your time and interest. I will wait to here back from you.

Thanks / Terry
tjanssen@northamericanenergyco.com
North American Energy Co.
312 N. Main St.
Stillwater, MN 55082
Ph. 651-275-3940 Fax 651-275-3932
www.northamericanenergyco.com



11/02/02 15:34 FAX 515 289 2499

IAMU

02



IOWA
ASSOCIATION OF MUNICIPAL
UTILITIES

November 4, 2002

Terry Janssen
North American Energy Company

Dear Terry:

Thank you for agreeing to speak at the 8th Annual IAMU Water and Wastewater Operators' Training Workshop. We have put together what we feel is an impressive selection of speakers and topics. Water and wastewater operators should have some valuable training opportunities available to them through these selected presentations.

As you can see on the enclosed workshop agenda, your presentation, *Using Potable Water in Heat Exchangers*, is scheduled for 11:00 a.m. on Wednesday, November 13, 2002. We plan on the session lasting one hour. If there are questions or concerns with the time at which the session is scheduled, please let me know. I am also available if you wish to discuss the content of information to present or the size and background of the audience to whom you will be speaking.

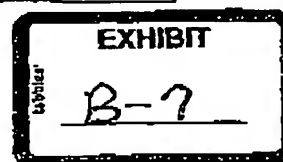
Also enclosed is a speaker information form on audio visual needs and a biography. Please complete this information and fax (515/289-2499) or mail it back to me ASAP.

We are looking forward to another successful IAMU Operator Training Workshop. Last year, in the seventh year of the workshop, we had over 200 attendees. We hope for an even greater turnout this year. If you have any questions or suggestions about the workshop, please feel free to call me at 515/289-1999. Otherwise, I look forward to seeing you in November.

Sincerely,

Karen Nachtmann
Water Services Coordinator

1735 ME JOTH AVENUE
ANKENY, IOWA 50011-9353
515/289-1999
FAX: 515/289-2499



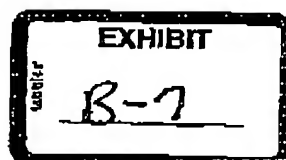
WATER AND WASTEWATER OPERATORS' TRAINING WORKSHOP

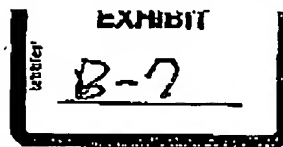
November 13, 2002

WEDNESDAY MORNING

	<i>Water Treatment</i> Salon A & B North	<i>Water Distribution</i> Bennigans East & West	<i>Wastewater</i> Wisconsin
8:00 a.m.	REGISTRATION		
8:30 a.m.	wt Filter Maintenance and Troubleshooting Les Uhlmeyer US Filter <i>A review of routine maintenance for filters.</i>	wd Dechlorinating Potable Water in Distrib. Systems Jeff Fischer Fischer, Harris & Assoc. <i>Learn about techniques for dechlorination.</i>	ww Vacuum Sewer Systems Todd Olson Airtvac Inc. Debra Leigh Leigh Environmental Equip. <i>Learn about this technology.</i>
9:30 a.m.	wt Ammonia and Groundwater Issues Mike Wade IDNR <i>Learn how ammonia may be affecting your system.</i>	wd Backflow Prevention Michael Magnoni IA Dept. of Public Health <i>An overview of the rules, programs and devices.</i>	ww Phosphorus Issues Ubbo Agena IDNR <i>Learn about the new standards and impacts.</i>
10:30 a.m.	REFRESHMENT BREAK -- SPONSORED BY: EMC INSURANCE		
11:00 a.m.	wt Nitrate Removal Neal Kuehl Kuehl & Payer Ltd. <i>Learn about nitrate removal facilities in Iowa.</i>	wd Using Potable Water in Heat Exchangers John Root - Muscatine Roy Ney - IDNR Dave Kalkwarf - Marion Terry Janssen - North American Energy Co.	ww Water Quality Standards Ralph Turtle IDNR <i>Learn about upcoming changes in water quality standards.</i>
Noon	LUNCH <i>(Lunch provided for workshop attendees in Salons B & C)</i>		

NOTE: wt - water treatment CEUs wd - water distribution CEUs ww - wastewater CEUs





Water & Wastewater Operator's Training Workshop
November 12 - 14, 2002

SPEAKER LIST

Ubbo Agena
Iowa Department of Natural Resources
Wallace Building
Des Moines, IA 50319
Phone: 515/281-6402
Fax: 515/281-8895
ubbo.agena@dnr.state.ia.us

Ken Barber
Telemetric
9941 W. Emerald
Boise, ID 83704
Phone: 208/658-1292
Fax: 202/323-5575
telemetr@mindspring.com

Mark Bortle
Iowa DOT
800 Lincoln Way
Ames, IA 50010
Phone: 515/239-1587
Fax: 515/239-1845
mark.bortle@dot.state.ia.us

Patti Cale-Finnegan
IAMU
1735 NE 70th Ave
Ankeny, IA 50021
Phone: 515/289-1999
Fax: 515/289-2499
pcale@iamu.org

Heath Casteel
Performance Pipe
5461 N. East River Road #1102
Chicago, IL 60656
Phone: 773/551-7792
Fax:
castehw@cpchem.com

Kristin Clay
Test America
704 Enterprise Drive
Cedar Falls, IA 50613
Phone: 800/750-2401
Fax: 319/277-2425


Ken Deason
Environmental Protection Agency
901 N. 5th St
Kansas City, KS 66101
Phone: 913/551-7585
Fax: 913/551-7585
Deason.ken@epamail.epa.gov

Jeff Fischer
Fischer, Harris & Associates
2775 Meadow Drive
St. Charles, IL 60175
Phone: 800/224-7579
Fax: 800/796-9357

Steve Gearhart
Municipal Pipe Tool
PO Box 398
Hudson, IA 50643
Phone: 319/988-4205
Fax: 319/988-3506

Bob Goldhammer
Polk County Emergency Management Agency
111 Court Ave
Des Moines, IA 50309
Phone: 515/286-2107
Fax: 515/323-5256
polk.county@emd.state.ia.us

Todd Hayes
United Rentals Trench Safety
3322 Nebraska Ave.
Council Bluffs, IA 51501
Phone: 712/322-3250
Fax: 515/986-5945

 **Terry Janssen**
North American Energy Company
312 N. Main Street
Stillwater, MN 55082
Phone: 651/275-3940
Fax: 651/275-3932
tjanssen@northamericanenergyco.com

Dave Kalkwarf
Marion Municipal Water Department
10 8th Ave
Marion, IA 52302
Phone: 319/377-4839
Fax: 319/377-7892
dave@waterdept.ci.marion.ia.us

Neal Kuehl
Kuehl & Payor
1725 N. Lake Ave.
Storm Lake, IA 50588
Phone: 712/732-7745
Fax: 712/732-6293
kuehlnr@kpltd.com

Debra Leigh
Leigh Environmental Equipment
10838 Old Mill Road Suite A
Omaha, NE 68154
Phone: 402/330-2844
Fax: 402/330-2813
debraleigh@qwest.net

Draft 11-29-02

Minnesota Department of Health

This letter is written on behalf of North American Energy Co., to request approval by the Minnesota Department of Health to insert a heat exchanger known as the GLX for into municipal water mains within the State of Minnesota (there is a patent pending on the GLX heat exchanger).

The GLX heat exchanger is a double wall copper pipe with a closed loop of copper pipe surrounding it. A section of the city water main would be cut and replaced by the heat exchanger, thereby allowing the city water supply to flow through the heat exchanger. The GLX heat exchanger allows for the flow of a fluid from the heat pump through a close loop line conduit to the heat exchanger and after passing through the heat exchanger the fluid flow then returns to the geothermal heat pump. The fluid in the closed loop line does not mix with water flowing in the water main. A photograph of the heat exchanger accompanies this letter.

The section of the water main where the heat exchanger is attached will be encased in an insulated vault with a locking mechanism to allow restricted access into the vault to service the heat exchanger.

Enclosed with this letter is a drawing showing a geothermal system with a closed conduit loop line from the geothermal heat pump to the GLX heat exchanger within the loop line, the GLX heat exchanger being attached to the city water main by insertion into it.

Based upon our meeting on Nov. 27, 2002 it is our understanding that the approval of the Minnesota Department of Health will be subject to installation plan review for each project by the Minnesota Department of Health and the approval of other interested governmental bodies, including, but not limited to, the affected municipality.

We understand that any approval of the GLX heat exchanger will not constitute an endorsement of that product by the Minnesota Department of Health.

Please accept this letter as a request to approve the GLX heat exchanger for insertion into municipal water mains, subject to such qualifications as the Minnesota Department of Health deems necessary to ensure a safe water supply.

North American Energy Co. is most anxious to obtain the approval of the Minnesota Department of Health because, as we have discussed, there is considerable interest by municipalities in the use of the GLX heat exchanger for projects within their respective municipalities. Your efforts to expedite the approval will be appreciated.

We look forward to hearing from you.



Laurence A. Anderson
ATTORNEY AT LAW

December 21, 2003

Brian Noma
Public Health Engineer
Minnesota Department of Health, Suite 220
St. Paul MN 55164

Dear Mr. Noma:

On November 27, 2002, Terry Janssen and I met with you and Chad Kolstad for the purpose of obtaining the approval of the Minnesota Department of Health for the installation of a double walled heat exchanger (referred to in this letter as the "GLX") into municipal water mains. Terry and I left that meeting with the understanding that the Minnesota Department of Health would provide a letter of approval for the installation of the GLX into municipal water mains. However, prior to issuing that letter of approval you asked us to send to you a letter describing the GLX. Hopefully this letter contains the information that you need.

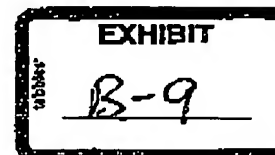
We also understand from what you told us in that meeting that approval by the Minnesota Department of Health will be subject to installation plan review for each project by the Minnesota Department of Health and the approval of other interested governmental bodies, including, but not limited to, the affected municipality. We also understand that approval by the Minnesota Department of Health does not constitute an endorsement of the GLX.

The product description for the GLX (for which a patent is pending) is as follows. The GLX is a double walled heat exchanger. The GLX has an inner pipe made of copper (through which the city water will flow) which will have a PSI rating at least equal to that of domestic water plumbing code requirements. The inner pipe is wrapped by a coiled pipe made of copper through which a heat transfer fluid of water and food grade glyco will flow from the GLX to and through the heat pump and then return to the GLX (the "Closed Loop"). A side view and end view of the GLX is shown on Exhibits A, B, Fig. 1 and Fig. 2 enclosed with this letter. Both the inner pipe and the Closed Loop are made of Type L hard copper.

The heat transfer fluid and the water from the water main do not mix. A failure of either the inner pipe or the Closed Loop will not result in a cross connection with, or permit back siphonage of the heat transfer fluid into the municipal water system.

Referring to the diagram that is enclosed as Exhibit C, the Closed Loop is attached at one end to the heat pump (located within the building) at two points, one being a fluid inlet (with a flow meter attached thereto), and the other a fluid outlet (with shut down switch

P.O. Box 240357 * Apple Valley, MN 55124
TELEPHONE: 952.997.6677 * FACSIMILE: 952.997.6545



to monitor leaks and to shut down the apparatus if a leak is detected). The fluid within the Closed Loop is moved within the Closed Loop by a pumping means at or in the geothermal heat pump. The pressure of the heat transfer fluid in the Closed Loop will be maintained at a ten (10) to fifteen (15) PSI which is less than that of the water flowing through the water main

The Closed Loop contains a heat transfer fluid that is food grade and ecologically safe. Normally the heat transfer fluid in the Closed Loop will be a water and glycol mixture but it could be a refrigerant that is either R22 or R410. If a refrigerant is used it boils at -40.8 degrees centigrade and thus would be in a gaseous state as it travels through the Closed Loop. Consequently, the refrigerant cannot mix with the water.

As shown in Exhibit C, the section of the water main where the GLX will be attached is encased in an insulated vault with a locking access cover constructed so as to allow restricted access into the vault to service the heat exchanger or the water main to which it is attached. The bottom of the vault will consist of gravel. Within the vault, and attached to the outlet of the Closed Loop, there is a first walled failure alarm so that any failure in the system at that point would be detected, allowing for the shutting down of the apparatus and servicing and repair in the vault area. If there is a failure of the GLX's inner pipe or the Closed Loop, the potable water or the heat transfer fluid, as the case may be, will be discharged into the vaulted area. No hazards will be created by such a discharge.

Please accept this letter as a request for the written approval of the Minnesota Department of Health for the insertion GLX into municipal water mains, subject to such installation procedures as the Minnesota Department of Health deems necessary to ensure a safe water supply.

Geothermix, LLC is most anxious to obtain the approval of the Minnesota Department of Health because there is considerable interest by municipalities in the use of the GLX for projects within their respective municipalities. Your efforts to expedite the letter of approval will be appreciated.

We look forward to hearing from you.

Sincerely:


Laurence A. Anderson

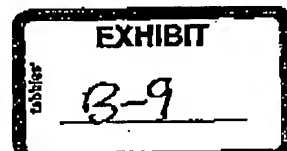
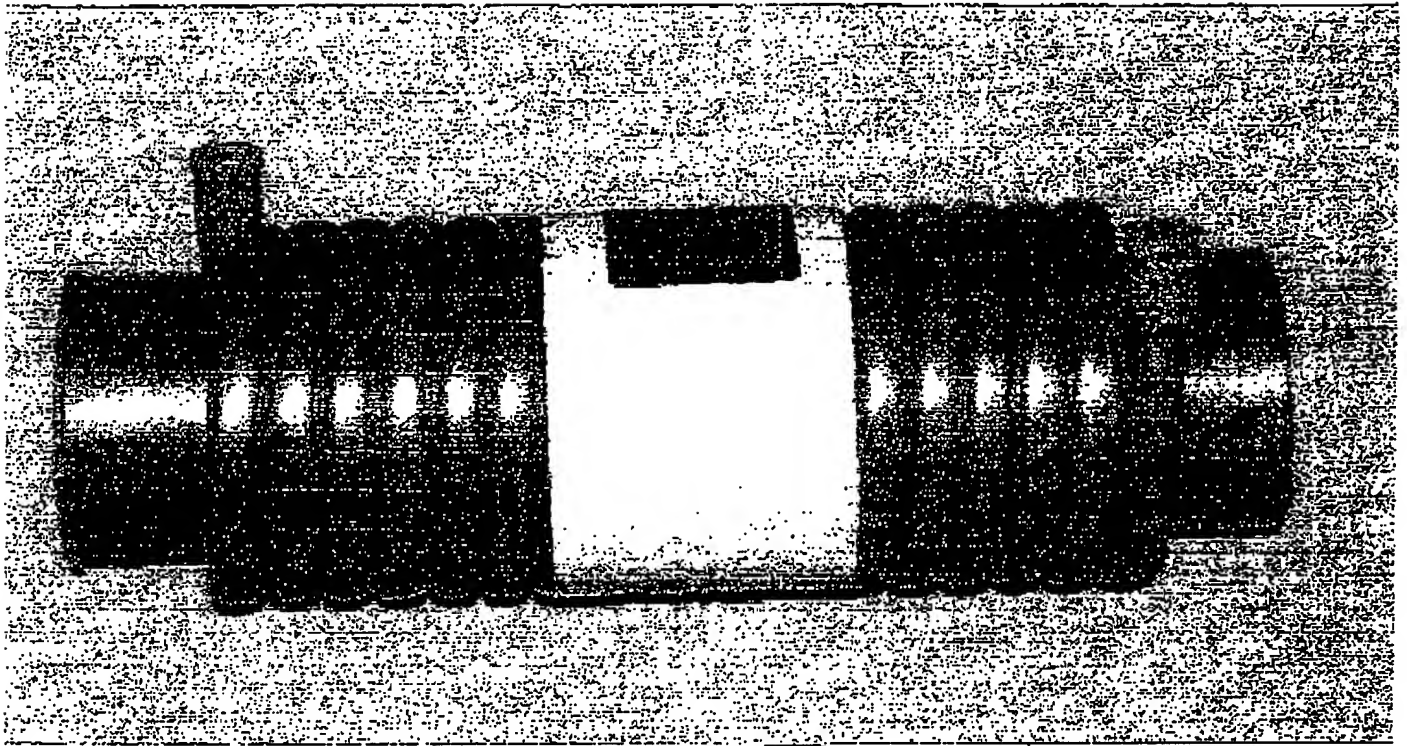
Enclosure:

CC: T. E. Janssen

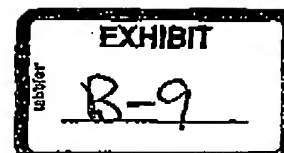
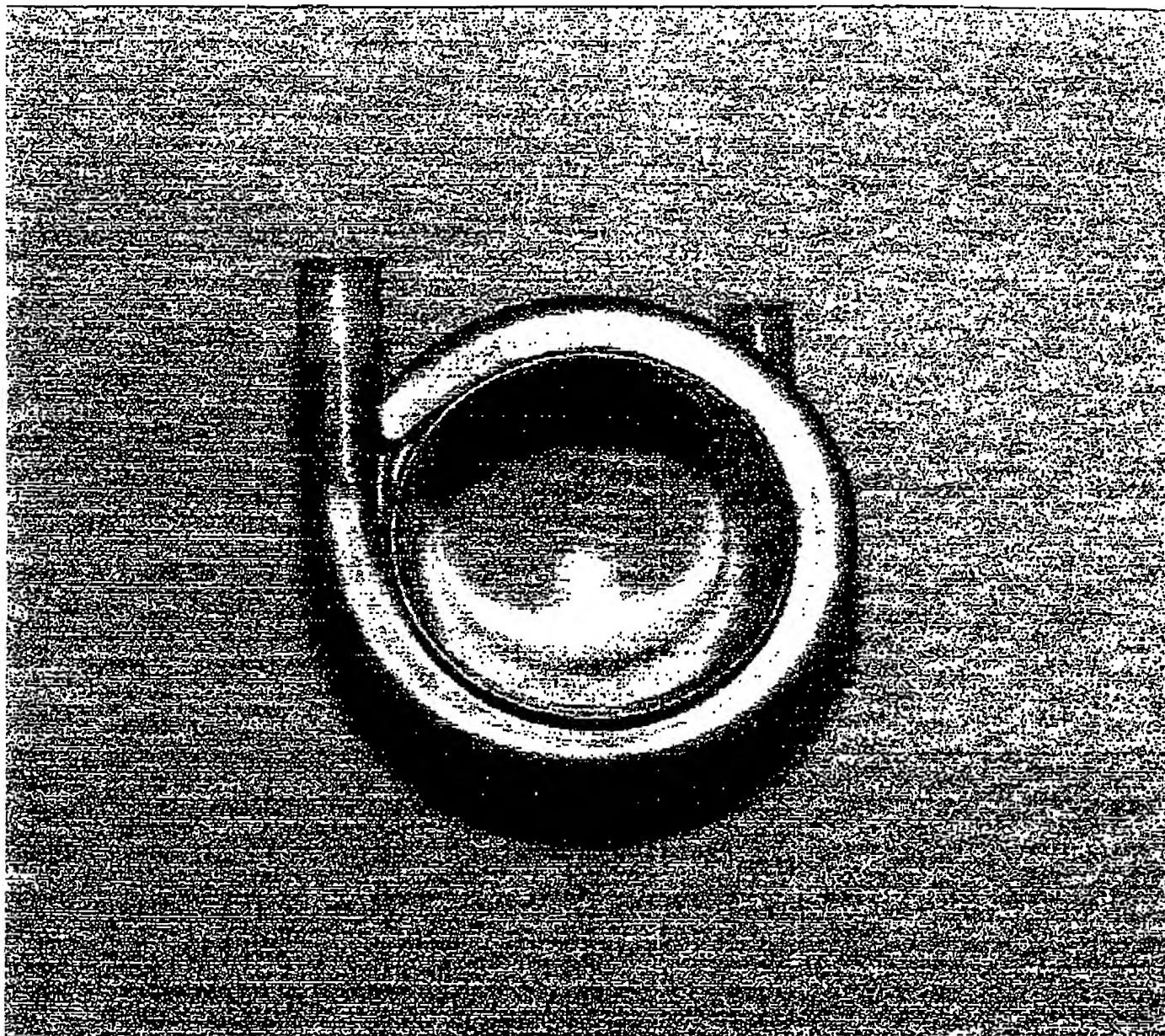
P.O. Box 240357 * Apple Valley, MN 55124
TELEPHONE: 952.997.6677 * FACSIMILE: 952.997.6545



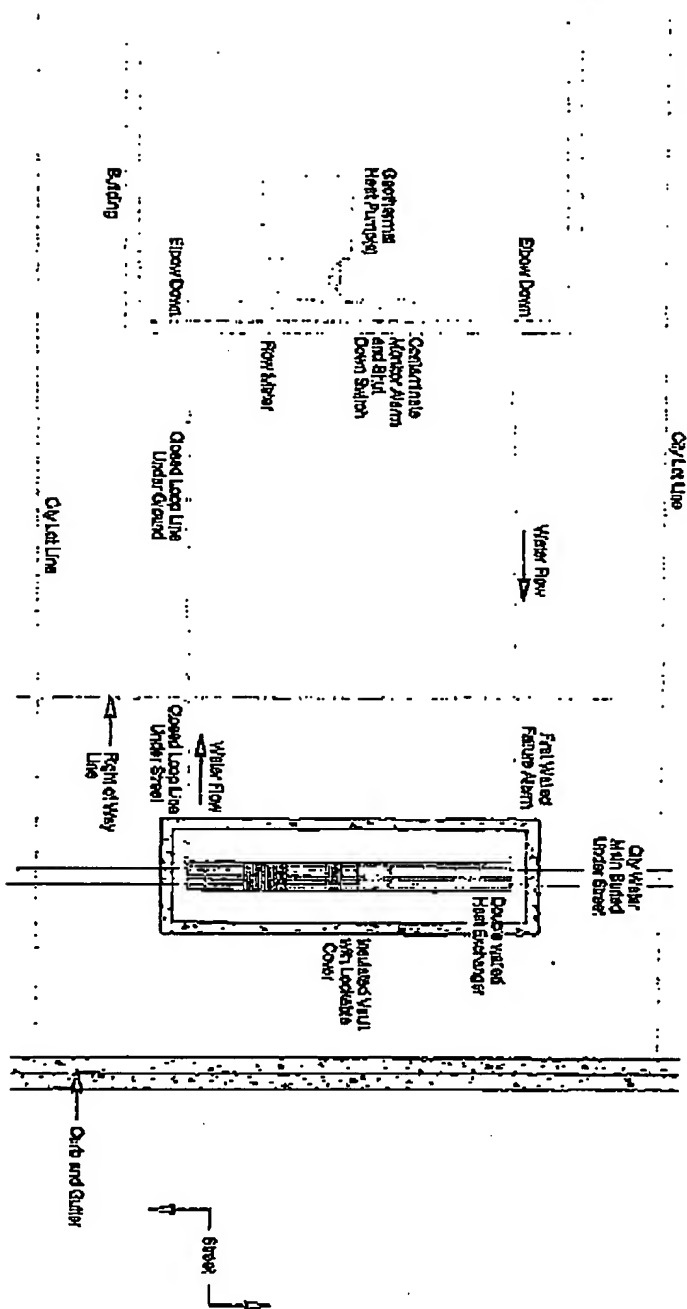
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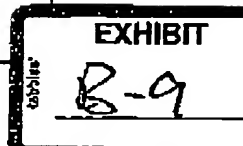


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DLX (GEOTHERMAL LOOPLESS EXCHANGER)™
PATENT PENDING

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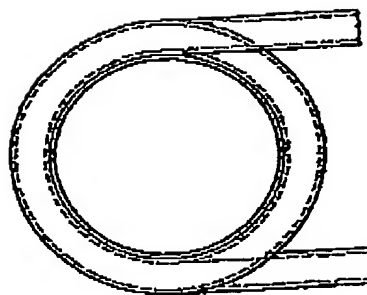


Fig. 2



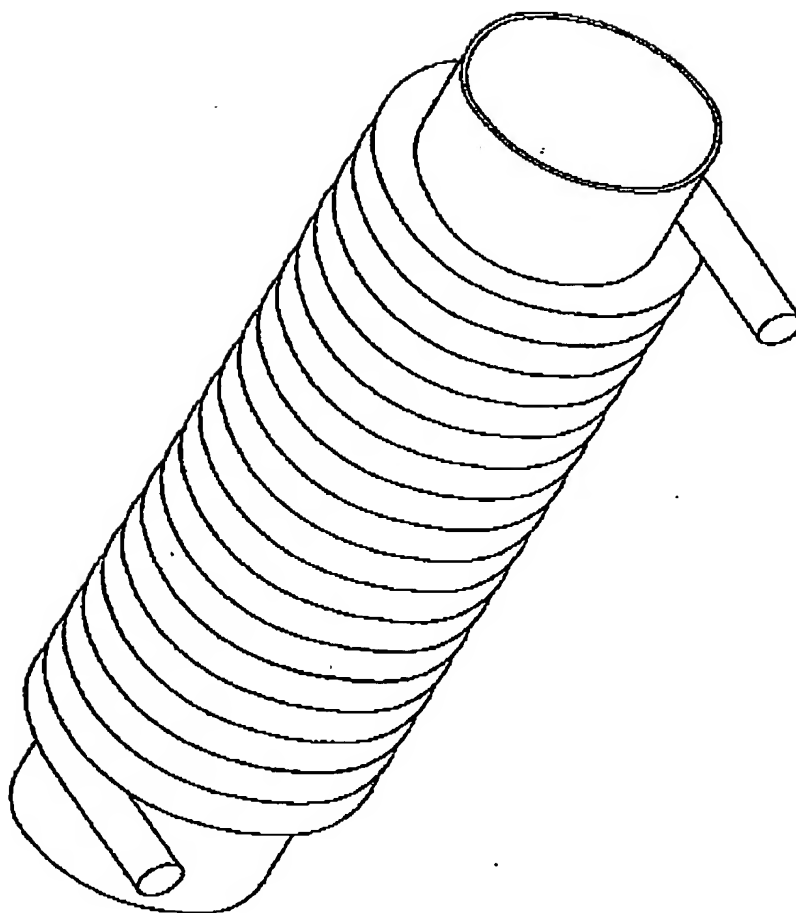
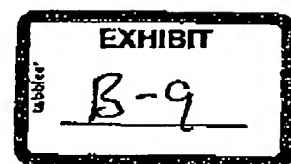


Fig. 1



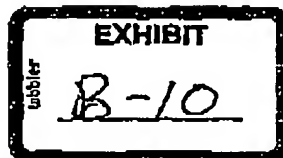
From: Outlook Express: T.E. Janssen
To: Lebo, John at Doucette Industries Inc. GFX
Subject: E-mail copy
Date: 9:11 AM - 8/26/2002

Hi John
Below is an e-mail I just received from Muscatine Power & Water.
Thanks / Terry
tjanssen@northamericanenergyco.com
North American Energy Co.
312 N. Main St.
Stillwater, MN 55082
Ph. 651-275-3940 Fax 651-275-3932
www.northamericanenergyco.com
Hi Terry:

I met the fellow who wrote the e-mail which is attached below at MREF. He seems to be connected in Wisc. and interested in using the municipal water infrastructure as a energy source for a ground source heat pump.

I thought you might want to contact Bill. Perhaps we can work as a team to promote this technology.

John R. Root
Muscatine Power & Water
Energy Services Advisor
3205 Cedar St.
Muscatine, IA 52761
Phone: 563/262-3354
Fax: 563/262-3345
e-mail (W): jroot@mpw.org
Webpage: mpw.org/energy.htm





Notes/History

T. E. "Tony" Jansse, My Record
35246 US Hwy 19
#318
actionmgr@comcast.net
Palm Harb. FL 34584

Field Changed	2/18/2002	1:06 PM	ID/Status - WFL-Disputes ALAC/Harris
Contact : Graystone Management			Judd Orff
To-do Done	5/22/2002	5:31 AM	Lease expires 10/31 ? / Check file to see if we have to do anything
To-do Done	5/14/2002	8:00 AM	\$500 + \$475 due on 1st beginning 10/01
To-do Done	4/2/2002	8:00 PM	\$500 + \$475 due on 1st beginning 10/01
To-do Not Done	3/30/2002	2:49 PM	Lease expires 5/31
To-do Done	3/19/2002	9:14 AM	\$500 + \$475 due on 1st beginning 10/01
To-do Done	2/3/2002	1:18 PM	\$500 + \$475 due on 1st beginning 10/01
To-do Done	1/23/2002	6:47 PM	\$500 + \$475 due on 1st beginning 10/01
To-do Done	1/17/2002	6:29 PM	\$500 + \$475 due on 1st beginning 10/01
Contact : Graystone Management			Brian Zeller
To-do Done	9/5/2002	8:48 PM	Send Check \$1,500
To-do Done	8/5/2002	6:26 AM	Send Check \$1,500
To-do Done	7/2/2002	8:30 AM	Send Check \$1,500
To-do Done	5/28/2002	3:00 PM	Finalize lease / Check exp date
To-do Done	5/28/2002	2:30 PM	Send Check \$1,500
To-do Done	5/5/2002	4:56 PM	Send Check \$1,500
To-do Done	4/3/2002	8:00 AM	Send Check
Call Completed	3/11/2002	6:55 PM	Discuss lease
Call Completed	3/6/2002	8:00 AM	change residence lease
To-do Done	2/20/2002	8:32 PM	change residence lease / Meeting with Roger
Meeting Held	2/1/2002	3:00 PM	Meeting on spec / counter proposal meet at electric shop
Call Completed	1/31/2002	3:55 PM	Proposal
Call Completed	1/23/2002	6:45 PM	Look at light fixture facility
Call Completed	1/18/2002	5:11 PM	Look at light fixture facility
Meeting Held	1/11/2002	5:30 AM	Look at light fixture facility
Contact : Groebner & Associates Inc.			John Nylin
Field Changed	11/30/2002	4:16 PM	ID/Status - Suppliers Loop System
Field Changed	11/30/2002	4:10 PM	ID/Status - Suppliers Loop System
Field Changed	11/30/2002	3:53 PM	ID/Status - Supplier Loop System
Field Changed	11/30/2002	3:45 PM	ID/Status - WFLS-Supplier Loop System
Call Left Message	5/16/2002	12:34 PM	Any tye of Rfing for HDPE to Copper
Call Completed	4/23/2002	4:54 PM	Any tye of Rfing for HDPE to Copper
Field Changed	4/17/2002	7:27 AM	ID/Status - WFSG-Suppliers Geo
Contact : Gulf Coast Marine Electric Inc.			Ray Howerton
Field Changed	11/30/2002	11:05 AM	ID/Status - Aq. / Maint. / Rems. / Boat
Field Changed	2/18/2002	1:05 PM	ID/Status - WFEM-Boat Maint Sched.
Contact : Gulf Harbour Yacht & Country C...			Perry Modell
Field Changed	2/18/2002	1:05 PM	ID/Status - Marinas
Contact : Gulfstream International Airlines			Troy Linholm

Created 9/19/2005 at 7:29 AM

32

